

IMPLICATIONS OF SUPER LEADERSHIP AND SELF LEADERSHIP FOR PRODUCTION PROCESSES IN INDIAN IT SECTOR

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ABSTRACT

The leadership behavior of leaders and the followers goes a long way in determining the effective functioning of the teams involved in the production processes. Production processes vary industry to industry and so do the leadership processes involved in them. As Production Engineering incorporates the integration of production technology, engineering sciences with the management sciences, the concept of production processes is pivotal and crucial to it. They basically involve conversion of inputs into outputs in an efficient effective manner. It thus deals with the transformation process and the outputs of it may be some products or / and services. This research paper tries to explain the team members and leaders behavior and it also reports on how these team members show a particular pattern and process in the way they lead, and help each other towards the team and organizational goals. These particular patterns in the IT team production processes are identified by leadership scholars as shared leadership. The Super Leadership and Self Leadership are indispensable part of shared leadership. Finding how are the production processes being led in IT sector in general and what implications do these two very important factors of shared leadership, i.e. super leadership and self leadership, have on the production processes of IT teams in particular is the purpose of this paper?

KEYWORDS: *Production Processes, IT Sector, Shared Leadership, Super Leadership & Team Member Value*

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INTRODUCTION

Production is the core function of business organizations as marketing and finance. The logic behind is that organizations come up using their finances to produce a product or a service to satisfy the customer needs and uses the marketing strategies to reach the prospective customers and earn profit. Production, Marketing and Finance are thus the core functions of business organizations. These are basic for the existence of these organizations and also have to be effective and efficient for the organization's survival. It is meaningless to set up business units which are not in production of either a product or / and service. The principles of production engineering may impact almost all industrial sectors. IT sector is no exception. In the IT sector, the transformation happens through teams of experts. This sector is identified mainly with computer programming and developing software's for different services and operations. Production requires to be managed properly. The supervisors and managers dealing with it are expected to lead and motivate the concerned workers. Production processes in information and knowledge industry vary from the other Industries in terms of tangibility and intangibility of products. IT sector, mostly produces software applications for internal user and also for external users. The production processes of the IT sector are thus commonly described as involving the developer, in scripting, coding, testing, etc. phases for software development. These different phases are carried out by the different

experts who are part of a team. Thus IT sector, working through teams is a common phenomenon. The self leading and self, helping abilities of the team members in the assigned portion of the whole work is what brings value to each member and has been termed here as self leadership. The complexity of the work in IT sector demands for leadership role from each team member. In such situation, the formal leader is obliged to share his leadership responsibility with all the team member by encouraging the replacement of conformity, encouraging initiative, creativity and independence among the team members. This style of leading where the leader shares his responsibility of guiding and leading towards the goal with followers is super leadership. It can happen only when the people who are to be led are competent in their area of expertise and are able to lead themselves. This ability of the team members has been termed as Self Leadership. Self Leadership is the characteristic of the team member which make him valuable to the whole team because it is the ability to handle the responsibility on their own.

LITERATURE REVIEW

Super Leadership: Manz and Sims Jr, describe Super leadership as a leader who leads others to lead themselves. In their book *New Super Leadership*, they mention four types of leaderships as common, i.e. the strong man, the transactor, the visionary hero and the SuperLeader (Figure 1). The Strongman works by knocking some heads to get his followers do what he wishes. The transactor gives away award in exchange for compliance from his followers. The Visionary Hero works through creating a motivating vision for the future. This type of leader is inspirational. The Super Leader is super because he encourages the followers to work best with their abilities and knowledge. Thus his own strength is multiplied by the strengths of his followers. In fact power is shared between followers and leaders. How does the Super leader help followers know their potential to be self leaders. Self leadership is achieved gradually through Super Leader's assistance.

FOUR TYPES OF LEADERS				
	Strong Man	Transactor	Visionary Hero	SuperLeader
Focus	Commands	Rewards	Visions	Self-leadership
Type of power	Position/ authority	Rewards	Relational/ inspirational	Shared
Source of leader's wisdom and direction	Leader	Leader	Leader	Mostly followers (self-leaders) and then leaders
Followers' response	Fear-based compliance	Calculative compliance	Emotional commitment based on leader's vision	Commitment based on ownership
Typical leader behaviors	Direction/ command	Interactive goal setting	Communication of leader's vision	Becoming an effective self-leader
	Assigned goals	Contingent personal reward	Emphasis on leader's values	Modeling self-leadership
	Intimidation	Contingent material reward	Exhortation	Creating positive thought patterns
	Reprimand	Contingent reprimand	Inspirational persuasion	Developing self-leadership through reward & constructive reprimand Promoting self- leading teams Facilitating a self- leadership culture

Figure 1: Four Types of Leaders (Manz and Sims Jr.1991)

Some of the behavioral style of SuperLeader as put by Manz and Sims.Jr:

- Help the follower's develop self leadership skills;
- Encourages others to take responsibility;
- Encourages initiative;
- Encourages self goal setting by the followers;

- Encourages self - problem solving by the by the followers;
- Tries to ensure that the followers have the knowledge and information required by the followers for working through self leadership.

According to Manz and Sims (2002), 'Follower self leadership isn't a permit or a privilege.' It is a strategy to empower the followers. This strategy is achieved through working on enhancing the skills of the followers, their confidence, knowledge and information regarding work and organization goals.

The Super leadership deviates from other leadership styles in the treatment of the follower and raises their status to a leader. Followers self leads themselves. In these situations it seems as if the super leader has no leadership role, but actually his leadership lies in the fact that he guides the followers and creates such environment that they are the best self leaders for themselves and for their team. A Super leader is daring enough to take the risk of giving a chance to the followers to learn and practice self leadership.

Super leadership believes in the potential of the followers to lead through self leadership. The Super leadership has to work to bring out the best of talent of the followers. Due to lean management techniques, innovative workplace arrangements and flatter structures, Super leadership have become an important way of leading (Pearce Base article below in reference)

Self Leadership: Self Leadership is the process of influencing oneself with an intention to have better satisfaction and improved performance. According to Manz and Sims (2002), 'not every employee comes with a fully developed repertoire of self-leadership skills.' But a Super leader can teach self leadership skills to the followers. It's better to engage the employees in self leadership development at the beginning of their careers with the organizations.

Manz and Sims and put forward three steps in the development of Self Leadership:

- **Initial Modelling:** This requires that the leaders themselves illustrate self leadership to others and serve as models.
- **Guided Participation:** It requires that when the followers try to work using self leadership, it is the responsibility of the super leader to be there and keep guiding in the right direction, through relevant questions, till the time followers gain self confidence. Self Observation, self setting goals, self evaluating, and self rewarding are the aids for guided participation.

Gradual Development of Self Leadership: Initially the Super Leadership rewards specific performance, but slowly rewards instead of being rewarded to performance shift to self leadership. This way self leadership get developed by the team.

RESEARCH METHODOLOGY

Research Problem: Discuss the first two important components obtained through factor analysis of the data collected from team member involved in software production in the IT sector. Do the item characteristics apply to the Super leadership concept and Self leadership concepts of shared leadership being used by the teams in the IT sector processes and how do they influence the leaders and the followers engaged in the production processes in the IT sector

Sample: The team members of the IT company were tapped to get responses on a questionnaire.

Sample Size: The responses from 400 team members from 50 IT companies were successfully collected.

Tools for Data Collection and Data Analysis: Scale for Measuring Shared Leadership was developed. It was developed to explore the various variables chosen from literature review on the subject under study. Also, several rounds of discussions were undertaken with academicians and professionals of IT sector. The SPSS scale command was applied to sample of 271 team members from the Indian IT sector and a 23 item Scale for Measuring Shared Leadership was developed. Data was collected using the Scale for Measuring Shared Leadership from 400 respondents who were team members in IT companies. The data collected was put to factor analysis in SPSS.

RESULTS AND DISCUSSIONS

Prerequisites for factor analysis were ensured before. Firstly sample was taken to lie between the range of 10 to 15 respondents per item (271 hour). Secondly metric data were used (data collected through five point Likert scale). Thirdly KMO statistics came to be greater than 0.5. It came to be .932 here. Responses from 400 team members were taken and factor analysis was done using the SPSS. The cut off for variable selection was kept as greater than .5. The variables loaded on four components (Table 1). Which were named Super Leadership; Self Leadership; Interactive Working Factor and Task Complexity Factor. In this research paper, we analyze first two components which are named as Super leadership and Self Leadership which have been established by several scholars like Pearce, Manz, Sims Jr., etc to be important concepts under Shared Leadership.

**Table 1: Components and Different Variables with their Factor Loadings
(SPSS Result of Factor Analysis Rotated Component Matrix (a))**

	Component			
	1	2	3	4
Multidisciplinary contribution	.124	.136	.183	.789
Technical Complexity	.203	.182	.068	.802
Distributed Actions	.042	.082	.370	.736
Reciprocal dependency	.042	.212	.634	.206
Value to Member expertise	.209	.551	.406	.075
High Opportunities for decision making	.280	.581	.247	.173
Member Feedback	.269	.289	.540	.111
Work Through Consensus	.255	.616	.348	-.063
Synchronised plans	.514	.390	.424	.042
Communication Requirement	.512	.435	.229	.125
Member Decision	.447	.493	-.166	.318
Weight to opinion	.371	.639	-.139	.222
Area Specific Crisis Management	.146	.631	.285	.071
Expert Independence	.457	.540	.054	.239
Mutual Help	.256	.635	.177	.174
Leader Initiative (Team Selection)	.212	.021	.646	.285
Leader Initiative (Deliberations and meetings)	.612	.230	.455	.087
Leader Initiative (Empowered Behaviour)	.557	.357	.281	.060
Leader Initiative (Favourable Climate)	.720	.268	.087	.073
Conformity Replacement Effort	.618	.366	.152	.019
Initiative and creativity encouragement Effort	.675	.314	.154	.168
Formal Positional Leadership	.560	.296	.234	.106
Universal Responsibility Sharing	.786	.033	.060	.184

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 9 iterations.

Super Leadership: From the Factor Analysis done on the SPSS IBM, the first component showed the following 9 items / variables loading together:

- Synchronized plans (.514),
- Communication Requirement (.512)
- Leader Initiative(Deliberation and Meetings) (.612)
- Leader initiative for empowering behavior of team members (.557)
- Leader ship Initiative for Favorable Climate (.720)
- Member Conformity Replacement Effort by leader (.618)
- Initiative and Creative Encouragement Effort by leader (.675)
- Formal Positional Leadership (.560)
- Universal Responsibility for work within team (.786)

This factor was named as Super Leadership as most of the items actually depict the leadership characteristics under shared leadership. The above data on the working with the leaders in IT teams in Indian context shows that a leader has a very important role in the sharing leadership responsibility because 9 out of 23 variables group together under one component and relate to leader's working style under shared leadership. Thus Super leader, this is how a leader is described under shared leadership, is crucial for any process to function using shared leadership. This study shows that in the Indian Context the different items have varying importance in the team's functioning.

The most important item /variable under first component, i.e. Super leadership factor, is Universal Responsibility sharing. In the Indian context, the leadership responsibility has to be shared among all the team members. This variable has the highest loading (.786). This finding is very much in coherence with previous studies on Super leadership that first and foremost requirement of this type of leadership is that leadership responsibility is shared among the team members. Each member works and helps himself and others to lead.

The next important item / variable under the first component is 'Leader's initiative for creating a favorable climate' for Shared leadership. It has a factor loading of .720. Creation of a favorable climate for Shared Leadership is actually a broad concept and comprises of several measures which may result into a favorable climate for the Shared leadership process. In facts ynsynchronisation of individual and group plans, deliberations and meetings, communication, Leader 's efforts to empower team members, encourage their initiative and creativity, replacement of conformity with initiatives, etc may be taken as the measures to create a favorable climate. for shared leadership in teams.

Initiative and creativity, encouragement efforts of the leader mentioned in item, has the third highest loading (.675) under first component. It is closely being followed at fourth position by the ' conformity replacement efforts ' of the leader towards the followers and making them independent to take the decisions. The conformity replacement efforts actually help in encouraging the initiative and the creativity of the team members. A superleader dares to take the risk of allowing the followers take decisions and initiate problem solving.

The Superleader also takes initiative to for holding deliberations and meetings to bring the followers together. This item got the factor loading of .612. Since the superleader has experts under it as followers, thus he takes initiatives to bring them together for discussions and coordination. Although the team members work independently, but they are interdependent on each other. Thus full information regarding progress and direction of work is required.

In the Indian IT sector the Super leadership actually arises from 'Formal Positional leadership'. The Factor loading score of this item came to be 0.560. This fact was also supported by the interviews from the top managers and middle managers that Super leader is not formally appointed in the IT sector, but definitely in all cases it was being practiced by managers who were formally appointed to lead and manage the affairs. They had the formal authority to lead, although the style of leading is their discretion and convenience. Thus, this formal leader in order to work through the sharing of responsibility, works for empowering the followers. The factor loading for this leadership initiative for empowering behavior of the leader came out to be 0.557. A super leader empowers the followers through encouraging them to take initiatives towards problem solving, decision making and action taking for proper implementation. A Super leader takes the risk of delegating the responsibility and decision making power to the followers.

Under a Superleader, there are multidisciplinary team working towards a common objective combining their skill and talents. Thus, from time to time their efforts need to be put into synch. The Super leader along with expert team members has to synchronize the individual plans into a comprehensive whole.

The communication requirement is the last item to be included in the super leadership factor. This item is least important of all others. In the Indian context IT team members do not feel that the skill to be an expert in communication plays a very crucial role. As also supported by the interviews taken from managers, it was found that although participants under the superleader and superleader too need not be excellent at communication skills and most of the thing is taken care of through the deliberate and meeting held for information exchange still effective communication can be an asset while working with the teams.

Self Leadership: The second component is named 'Self Leadership ' and comprised of 7 items as follows:

- Value to member expertise (.551)
- High Opportunity for decision making (.581)
- Work through consensus (. 616)
- Weight to Opinion (..639)
- Area Specific Crisis Management (.631)
- Expert Independence (.540)
- Mutual Help (.635)

Under Self Leadership, the value of the team members is very high. The reason is that Shared leadership is possible when the team members are skilled, competent and talented. Thus, they are an asset and are valuable. The most important item /variable under second component, i.e. self leadership, is a weight of opinion of the team member (with factor loading of .639). In shared leadership the team members are experts or specialists in their field. Thus, their opinion is given great weight. A superleader gives them the liberty to self decide by giving lots of weight to their decisions. In the IT sector the team members are interdependent in nature. They all have to help each other for the

achievement of the group goals. Thus the second very important item under Self leadership is 'Mutual Help' (with the factor loading of.635).

The Self Leadership concept involves the experts of different areas of working for whom it is mandatory that each expert manages his own area as neither the other experts nor the leader is competent to guide him on his area of expertise. Thus the third important item under the second component is 'Area Specific Crisis Management'(with the factor loading of.631). In Self leadership, since team members are experts from a different area, thus they have the capability to manage the problems in their areas of concern. But it does not mean that this prevents them from helping others with their work. It only implies that members should take full control of the area he expertises in. Self leadership is not possible if the followers are not competent people of their own area of expertise.

The Self leadership Component has 'Work through consensus ' as the next item under it with a factor loading of.616. It is a very logical for the multidisciplinary team members to put their work to each other for mutual guidance and help so that each knows the progress and the direction of the work.

In the self leadership factor, the next item is ' High Opportunities for Decision Making ' with a factor loading of 0.581. It implies that the team members get a lot of opportunity to make decisions and determine the course of action of the work.

The value of a team member is high also because they are experts and know their area of working better than other team members. Each team member is valuable for the other due to their indispensable contribution made by the team member. Thus, with a factor loading of.551, ' Value to member expertise ' is an important item of the second component, Self Leadership factor.

The last item to be included in the Self Leadership component, is Expert Independence ' This item also tells about member characteristic of being autonomous and self decision making. It has, the factor loading of.540. This item forms an important part of the team member value because of the fact that members are valuable to the team because of their expertise and their unique contribution to the team assignments.

CONCLUSIONS

Super leadership as found in the Indian IT teams has close resemblance to the established Super leadership concept put for by important scholars of shared leadership. The Super leader in the Indian IT sector teams working on the team processes also works through identical methodology as used by Super leaders in western settings. There were nine variables/ items that loaded on this factor (Figure 2). The super leader in teams in software production processes in Indian IT sector uses the style of encouraging the team members to make self decisions. He helps in synchronization of the different plans of individual expert team members so that all actions are steer in the right direction towards the organizational goals. The variable universal responsibility for work (with factor loading of 0.786) is highly emphasized by the Super leader because he believes in sharing of leadership responsibility with all the team members. The sense of responsibility sharing is very basic to Super leadership style. For this the Super leader takes the initiative to create a favorable environment (factor loading 0.720) for shared leadership. The Super leader takes the risk of sharing decision making power with team members and tries to train them in this. He encourages initiatives taken by the team members and their creativity (factor loading.675) because this is how team members can develop their skills of sharing in responsibility of leading. In addition to this, to encourage the skill development, the Superleader in the Indian IT sector teams also makes effort for replacement of conformity with initiative (factor loading of.618). Conformity to rules, orders and set procedures,

is the follower style suitable for simple and static processes. For complex and dynamic and changing processes, the followers need to have the freedom to take contingency based actions and decisions. The Superleader has to infect balanced the paradox of freedom in action to team members and integration of their actions towards the goals of the team. For this he takes initiatives towards engaging the team members in deliberations and meetings (factor loading.612). These deliberations are very important tool for sharing the information regarding what decisions and actions expert team members plan. The nature of Super leader in the Indian IT sector has been formal positional leadership (factor loading.560). It implies that a person who has been formally given authority and power to lead embibes himself the Super leadership role because of the nature of the IT processes and challenges associated with it. The formal positional leadership of the Indian Super leader may contradict with the western Super leader from the point of view that the former has the formal authority to dictate, but opted for sharing compelled by the interdependent nature of work, whereas later may have situational authority. Under the former, the followers, although are given freedom for action and decision and responsibility is shared, still followers have the sense that their Super leader is a powerful person in terms of reward and punishment. In he western style of Super leadership, followers and the leader are on equal footing. The Super leadership studies have defined it as an individual who creates a favorable environment for shared leadership to work. From this study, it has come to light that in the Indian IT sector a Super leader is not just a person who creates a favorable environment for shared leadership but also has formal authority to lead. He is more powerful among the equals. He works to empower the team members (factor loading.557). More there are such efforts, more the team members get the confidence to work through the sharing of responsibility of leading.

The Super leader's efforts ultimately have to result into synchronized plans (factor loading.514) from all quarters under his authority. It is because a team cannot be allowed to work in various directions leading to nowhere. This variable gets very high loading because of the fact that separate efforts of synchronization are rarely required. It is because the other steps mentioned above and taken by the Super leader automatically help synchronization of individual expert plans. This fact was cross confirmed through an interview with some managers and CEOs in super leader roles, Ultimately the communication requirement of a Super leader is a skill (factor loading.512) of Super leader. His oration, way of communication, language competence may help in motivating the team. But this variable too gets a low factor loading in comparison to other variables for Super leadership factor because it is not a mandatory requirement for the successful working of the team. It may be a requirement in other styles of leadership, but not in the case of Super leadership where other variables play a more important role and have got higher factor loadings than this variable. Super leadership which works through building and empowering followers as self leaders, has become important because of the, among several factors, lean management concept, which wants no wastage of resources at any stage of production of products and services. Logically wastage can be removed only if people who have the expertise decide about and handle their concerned areas. It also helps in wastage of time in taking decisions, getting approvals from leaders and implementation. Thus Super leadership, self leadership and both leading to Shared leadership are there to stay under the situations where the task is interdependent in nature and complex and lean management is emphasized. It leads to decentralized processes for goal achievement.



Figure 2: Super Leadership Factor and the Nine Variables that Load under on using Factor Analysis

The Self Leadership in the Working Processes in Indian IT Sector Companies

Self Leadership is defined as the 'process by which people influence themselves to achieve the self direction and self motivation needed to perform' (Houghton et al, 2003). Self leadership involves self management of the work by the followers. Under this the team members has control their work and also regulate it. Self leadership plays an important role in facilitation of shared leadership (Houghton et al 2003). The Super leader gets the confidence to share the leading responsibility only if followers are competent enough to lead themselves on their own. By this logic, it can be assumed that self leadership may lead to shared leadership.

In the Indian IT sector, self leadership is established due to the fact that several items / variables (Figure 3), were found to be existing and loading together under the Self leadership factor obtained through factor analysis using SPSS.

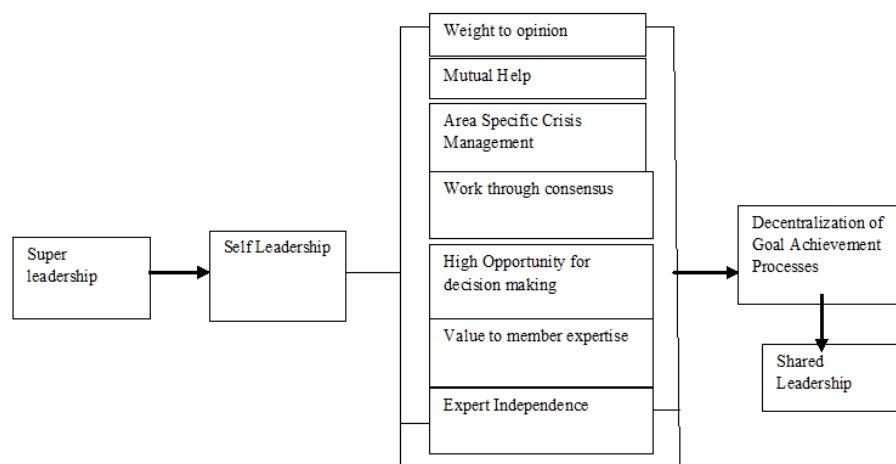


Figure 3: Importance of Self Leadership and Super Leadership in Decentralization of Goal Achievement Processes

In the IT sector, most of the processes are undertaken by the multidisciplinary teams of experts. The nature of work involves complex and interdependent tasks. This puts demands on the working and treatment of the followers in a way that gives them importance and freedom to handle their areas of specializations. The variables loading under the Self leadership factor, characterize such demands which ultimately lead to Self leadership. The opinion of the followers has a heavy weight (factor loading.639) in the functioning of the team towards goal accomplishment. Also the followers show mutual help attitude (factor loading.635) by encouraging each other and helping each other within their limits for the goal

accomplished. Under self leadership, the followers are expected to be competent in their area specific crisis management (factor loading.631). It is a necessity since neither the super leader nor the other followers have the competence to handle the specialized tasks. This also leads to the fact that this management has to be towards the goals of the team. Thus, there has to be a consensus in working and deciding about the direction of the working. All the self leaders and the super leader accept the direction of working and control it through consensus (Factor Loading.616). Due to the expert nature of the tasks the followers get a high opportunity for the decision making (factor loading.581). Every team member has to take decisions related to their area so they all get lots of opportunity in the decision making process. It is also because in the team, no other member is capable enough to decide for their area of specialization. The logical culmination of all above points is the fact that all the points mentioned above yield value to the expert team members. They become a valuable part of the team as without them tasks can't be completed. Finally the experts are independent in their specialized work to plan and execute (factor loading. 540).

Thus, these seven variables compose of the self leadership in the IT sector in India. They strengthen the self leadership. Self leadership is required for super leadership to become functional. (Figure). A Super leader, in fact encourages and facilitates self leadership. The variables which load on the self leadership show logical consequence is the decentralization of the goal achievement processes. Hought, Neck and Manz believed that self leadership and super leadership were the heart and art of shared leadership. This study also leads in the same direction.

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